I. Project Title and Project Purpose Statement
2016 Eco-Ambassadors: Water in a Changing Climate

The purpose of this project is to increase **community climate resiliency** related to increasingly severe and frequent storms in two communities in Cook County, Illinois: the Avalon Park and Chatham neighborhoods in Chicago, IL 60619 and regions surrounding South Holland, IL 60473. Residents in these areas are especially vulnerable to urban flooding and health problems caused by its impact on water quality, indoor air quality (mold), and mental stress. With poverty levels above the state average and awareness of climate change and its impact on flooding limited, pro-active and culturally-relevant outreach is needed. This project touches on issues contained within the **Clean Water Act, Section 104(b)(3)** and the **Solid Waste Disposal Act, Section 8001 (a)**.

Faith in Place will partner with six local member congregations to educate and empower residents to build their resiliency to water-related climate change impacts. Each of these congregations is a trusted local institution with deep, historic ties to its surrounding community. They thus serve as important multiplier organizations capable of reaching large swaths of residents. From these communities, we will recruit, train and support 12 youth (aged 16-21) to become "Eco-Ambassadors" on water-related climate change issues.

Outreach and education will be faith-based, culturally relevant, and promote intergenerational solidarity. Practical actions will focus on improving storm water management, limiting and recuperating from basement flooding, enhancing water conservation, and increasing awareness of water quality issues related to climate change.

II. Environmental, Public Health and community climate resiliency (if applicable) information about the affected community
A 2013 analysis by the Center for Neighborhood Technology (CNT) of 176,980 insurance claims from 2009-2011 for property damage due to flooding and sewer backup (The Prevalence and Cost of Urban Flooding) showed that much of the greatest flood damage in Cook County occurs in low income neighborhoods on the South and West sides, including Avalon Park/Chatham in Chicago and the South Holland region. Urban flooding is linked to extensive impermeable surfaces, inadequate storm water management, and the fact that 82% of Cook County's residences have basements. Parts of the South Holland region also lie within a flood plain.

Avalon Park/Chatham (60619) is a densely-populated African-American (97%) urban neighborhood where 48% of the homes were built before 1936. Its median household income is significantly below the state average ($36,677 vs. $53,234 in 2011) and 24% of residents live below the poverty level. It is home to 13 Faith in Place member congregations.

The Faith in Place member congregation in South Holland, IL (60473), Covenant UCC, is a large regional church that draws over 3,000 parishioners from primarily African-American low income communities that lie within floodplains, including Harvey, IL (60426) and Riverdale, IL (60827) where median household income is significantly below the state average ($31,564 and $36,768 in 2011) and almost one third of residents have incomes below the poverty level (31.8% and 29.5%). South Holland itself is a mixed income African-

American community with a median household income near the state average.

A 2013 CNT survey of local flood victims showed that most suffered stress, lost valuables, and lost work time due to cleanup. Residents in the affected communities also complain of basement flooding leading to mold, mildew, and fungi which exacerbate allergies, asthma, and other respiratory diseases. Chemicals from motor vehicles and lawns mix with storm-water, which pools in streets, floods basements, and contaminates city beaches.

According to the Illinois state climatologist, climate change is likely to increase both the frequency and intensity of extreme precipitation in the Chicago area. The existing storm water management system already cannot safely handle heavy rainfalls. Extreme precipitation has overwhelmed the municipal combined storm and waste water treatment system, leading to the release of raw sewage into the Chicago River, on 482 days since 2007 *(source:www.istheresewageinthechicagoriver.com from MWRD data)* and led to 198 flash flood warnings. Rainfall of just 2.5" within 24 hours is associated with local urban flooding.

Heavy rainfall also leads to increasing quantities of untreated wastewater being dumped into Lake Michigan, the source of municipal drinking water. A 2011 Chicago Tribune investigative report showed that 19 billion gallons of waste water was discharged into Lake Michigan between 2007 and 2010 vs. 12 billion from 1985 to 2006. Theses occurrences are projected to increase 120% by the end of the century. This, along with storm water run-off into Lake Michigan, can lead to an overgrowth of bacteria that can cause ear infections, rashes, and gastrointestinal illness in swimmers.

With this project, residents in the affected community will learn about local water-related risks tied to climate change, especially urban flooding. They will receive free green storm-water management tools such as rain barrels and native plants and shown how to use them. They will learn of outside resources and be supported to identify local assets to prevent and recuperate from basement flooding. Residents will become aware of water quality risks connected to climate change and how to minimize their own exposure, as well as the need for and methods to conserve water. These initiatives will also support the work of our partners in these areas and help mobilize future funding for neighborhood flooding preparedness.

III. Organization's Historical Connection to the Affected Community

The mission of Faith in Place is to inspire people of diverse faiths to care for the earth through connection, education, and advocacy. Our work is done in partnership with over 1,000 congregations in Illinois, including over 100 African-American religious institutions in the Chicago area. Our partners have deep roots in their communities and a wealth of social capital. Residents in the affected communities can be wary of government, utilities, and corporations. Faith communities may be the only institutions they trust. Therefore, in cases of floods, extreme heat, illness, and other shocks linked to climate change, they often turn first to religious communities for assistance and guidance.

Faith in Place has 13 member congregations in Chatham/Avalon Park *(Crerar Memorial Presbyterian Church, St. Mark UMC, Greater Institutional AME, Park Manor Christian Church, St. Stephen's Evangelical Lutheran, Bethlehem Star MB, St. Ailbe Catholic Church, New*

Covenant MB, New Life Covenant Church, Messiah-St. Bartholomew Development Center, St. Dorothy's Parish, Carey Temple AME, Avalon Park Community Church) with which it has worked for five years on topics such as energy (weatherization, energy audits), local food (community gardens, farmer's markets, healthy eating), habitat restoration, and water conservation. It has also worked with Covenant UCC in South Holland, IL for five years on similar issues and is currently developing culturally-relevant climate change engagement strategies there via a partnership with the Chicago Botanical Garden's C3I project.

It is our policy to hire staff from the communities we serve. They are thus known and trusted allies who understand and are accountable to the affected communities. The Eco-Ambassador youth workers will be recruited from partner congregations in the affected communities. The coordinator and supervisor will be former Eco-Ambassadors from the area. The project manager has worked closely with the potential partner congregations for five years to understand and meet their needs. She is also a member of Covenant UCC.

Their knowledge of local communities allows our staff to modify programming to fit each community's specific cultural and historical context. For example, our popular Monarchs, Birds, Migration, and Me initiative ties family stories of immigration (e.g., from the South to Chicago) to the creation of native plant gardens and restauration of local habitats. The diversity of our member congregations has also allowed us to become the only environmental organization in Illinois able to host conversations on the sensitive topic of race and environment, including a full day workshop in Chicago with over 100 participants.

IV. Project Description

This project will enhance community resiliency to water-related impacts of climate change through education and practical actions in the affected communities. Specifically, it will:

- Raise awareness of the risks of increasingly heavy and frequent precipitation to property, water quality, and health.

- Model simple flooding prevention measures by distributing and demonstrating green storm water management tools such as rain barrels and native plants.

- Inform residents of outside resources and help them identify community assets to prevent and recuperate from basement flooding.

- Boost the impact of partners' flooding preparedness work in these communities and so help mobilize future funding for neighborhood flooding preparedness.

- Enrich communities with youth who are well-informed and motivated to help them prepare for water-related climate change impacts.

- Educate residents on climate change impacts on water quality and how to prevent contamination -- e.g., not open fire hydrants to cool down in heat waves.

- Demonstrate methods to conserve water and explain their importance even when water is abundant.

- Share and potentially help civic technologists to improve IT tools, such as cell phone applications, to monitor and prepare for urban flooding.

This project's centerpiece is a seven week summer Eco-Ambassadors youth program. This will be the program's seventh year and the first to focus on water and climate change. It has never been funded by an EPA Environmental Justice Small Grant. Past topics have included energy efficiency, local food, and habitat restoration. The 2016 Eco-Ambassadors project will recruit, train, and support twelve youth aged 16-21 from the affected communities to serve as "ambassadors" to and from six home congregations in two regional communities. They bring their communities' concerns and values into classroom and experiential learning on water and return to their communities with practical actions, information, and resources.

To motivate and select the most impactful congregational partners, we will start early with outreach to area member congregations' staff and leaders, followed by workshops with congregational youth groups on the impact of climate change on water. This will help to identify community needs, attract high-quality Eco-Ambassador candidates, and instill a sense of anticipation and willingness within these congregations to support summer Eco-Ambassador activities. Depending on interest, we can also offer additional water-related programming to these congregations, such as water audits and our adult education curriculum Our Grandchildren's Water.

Youth and religious congregations are particularly impactful messengers on water issues related to climate change. New water is never created so how we manage it now affects all future generations. Water is strongly symbolic to people of faith, linked to purity and life. Furthermore, storm water management is an issue that must be managed collectively so damage is not simply shifted from one home to another. Preventing flood damage is also vital to maintaining intergenerational ties and cultural identity, lest family photos, heirlooms, and records be permanently destroyed.

This project will address issues of water and climate change in culturally relevant ways rooted in faith, family, community, and intergenerational solidarity. It will build on our adult education water curriculum Our Grandchildren's Water created in 2011 with experts in water, adult education, and theology. It is currently being updated with the latest scientific data by Faith in Place board member Dr. Ashlynn Stillwell, University of Illinois assistant professor of civil and environmental engineering specializing in hydro-systems. It will also adopt culturally-relevant climate change messages and community engagement strategies now being developed by Faith in Place via the Chicago Botanical Garden's C3I project.

Since 2006 we have partnered with 18 different community organizations for our Eco-Ambassadors project to offer programing that makes a positive impact in the lives of Chicago area youth and their communities. Here are quotes from past Eco-Ambassadors:

> *"Faith in Place has taught me what it means to be an environmental leader by teaching me that in order to get something done you have to speak up for what you want." – Joshua Chapman*

> *"I now know that everything is tied in together….Messing up the environment also*

makes it harder for us, as humans, and other species to survive." – Aloni Harris

"I would like to bring a lot of things back to my church. I would like for them to know as much as I did during the program." – Gonzalo Garcia

This program:

- Engages youth in activities that provoke observation, inquiry, and understanding about being a part of the natural world.
- Promotes respect for a home planet and all living beings and their communities.
- Encourages youth to actively be outdoors and experience the natural world.
- Offers a curriculum that aligns closely with the Illinois Board of Education's Learning Standards in Science and Social Science.

The summer Eco-Ambassadors program combines personal learning and community outreach work. Youth workers gather 3-4 days each week, including one week-end day, for about 4-5 hours per day for a total of seven weeks. Each week mixes classroom learning, field trips, and community outreach activities. Eco-Ambassadors receive a small stipend for their time, as well as meals and transportation.

Through presentations from experts, field trips, practical projects, reading, films, and discussion, the 2016 Eco-Ambassadors will learn how climate change is impacting water in the Chicago area, including flooding risks and prevention strategies, the municipal storm water management system, how native plants and rain gardens can help manage and clean storm water, the proper use of rain barrels, water treatment and quality management, IT tools for monitoring and preparing for flooding, and more.

At least five times throughout the seven weeks, the Eco-Ambassadors will take their learning back to the affected communities through practical activities. They will rotate between the host religious institutions and two regions so all areas are served. Feedback they receive from residents will be integrated on an ongoing basis into all activities. Eco-Ambassadors will all work together, alongside an adult coordinator and supervisor, to organize, promote, and run activities such as:

- Community preparedness workshops on "water in a changing climate" designed by Faith in Place staff which address issues such as storm water management and flooding risks, basement flooding prevention and recuperation, water quality, and water conservation.

- Distribution of free rain barrels to residents, as well as a demonstration of their installation and use – working with the Metropolitan Water Reclamation District.

- Planting of at least one rain garden and explanation of its benefit and design, as well as distribution of free native plants to residents – working with the US Forest Service, Illinois Department of Natural Resources, and master gardeners from the University of Illinois at Chicago (UIC).

- Identification of community assets related to flooding prevention and recuperation – e.g., examples of green infrastructure, plumbers, landscapers. This will adapt methods from the Asset-Based Strategy for Faith Communities model we have used in the past.

- Publicize and help IT specialists improve tech tools, such as cell phone applications, for monitoring and preparing for urban flooding – working with Open City IT volunteers.

These activities relate to the **Clean Water Act, Section 104(b)(3)** and the **Solid Waste Disposal Act, Section 8001(a).** Rain barrels, native plants, and water conservation all help keep water out of the city's combined waste and storm water system, reducing the likelihood that untreated sewage will be discharged into the Chicago River or Lake Michigan (the source of municipal drinking water). They also can limit runoff of chemical-laden storm water into Lake Michigan and reduce beach contamination. Native plants clean storm water flowing from streets contaminated by motor vehicle chemicals and pesticide-laden lawns.

Partners

Our most important partners for this project are our six member congregations in the affected communities: **Covenant UCC** in South Holland, IL and **five member congregations in Avalon Park/Chatham (TBD)**. They will help us raise awareness of these issues in their communities and identify community needs, recruit and support Eco-Ambassador candidates, provide meeting space and kitchen access for events, and publicize activities within their communities. They recognize and are committed to environmental stewardship as an extension of their faith, community service, and creation care. They are eager for additional programming to better serve their parishioners and community. We've worked closely with these congregations for five years and expect this to continue, including via regular follow-up contacts on their implementation of water-related measures.

We will partner with the **Metropolitan Water Reclamation District (MWRD)** to distribute free rain barrels and demonstrate their use. In addition, the Eco-Ambassadors will visit MWRD water treatment facilities to learn about storm water management and water treatment. The MWRD is committed to reducing water entering the combined sewer system and plans to distribute 15,000 rain barrels to residents between 2014 and 2017.

We will partner with the **US Forest Service** and the **Illinois Department of Natural Resources** to obtain free native plants to both distribute to residents and plant in demonstration rain gardens. We have worked together in the past in community gardening and habitat restauration programs. Both partners are committed to environmental justice goals of connecting disenfranchised urban communities to nature and replacing concrete with greenery to better manage storm water and reduce urban heat.

Master gardeners from the **University of Illinois at Chicago (UIC)** will help us to design and plant rains gardens, as well as provide education to Eco-Ambassadors and residents on the use of native plants to both manage and clean storm water. We have likewise worked in the past with UIC gardeners on community garden and habitat restauration projects.

We will apply learning from our existing partnership with the **Chicago Botanical Garden** in the C3I (Connecting Climate to Communities Initiative) project. Its goal is to increase knowledge, engagement, and participation in climate action among diverse communities by connecting community life and local issues to climate change.

We will partner with the **Shedd Aquarium** through their GLAD (Great Lakes Action Days) program to teach Eco-Ambassadors about beach stewardship, water contamination, and water conservation. Activities will focus on the 12th and 63rd Street beaches, which have strong cultural and historical significance to African-American and Hispanic communities.

We will work with the **Center for Neighborhood Technology (CNT)** "Rain Ready" program to educate both Eco-Ambassadors and residents about the risks of urban flooding and techniques to prevent it. CNT is already active in the Avalon Park/Chatham neighborhood and is keen for us to also raise awareness of urban flooding there. Concentrating the work of multiple groups in the same area could help mobilize future funding for more extensive and costly neighborhood flooding preparedness measures.

We will build on our current partnership with the **City of Chicago, Chicago Archdiocese,** and **Chicago utilities** to help religious congregations perform water audits. Experts from this program can both teach Eco-Ambassadors about water conservation and provide water audits to community congregations – both during and after the project.

We also hope to work with IT specialists who volunteer with **Open City** via weekly Open Gov Hack Nights. Volunteers are developing cell phone applications using public data to warn residents of likely basement flooding. They are keen to partner with groups working in low-income flood-prone communities to test and improve these and similar tools.

Timeline

October 2015 – March 2016. Outreach to member and non-member congregations in the affected communities. Workshops with congregational youth groups. Breaks for Advent (December) and Lent (February-March). Select six partner congregations. Adapt water curriculum.

April – May 2016. Open call for Eco-Ambassadors from within communities and alumni. We will strive to recruit two youth per host congregation. We will select one adult program coordinator and one supervisor from the alumni. Continue planning with congregations and develop Eco-Ambassadors' curriculum.

June 2016. Program coordinator begins. Working with the project manager, he or she will help select Eco-Ambassadors, plan activities, gather supplies, and coordinate with partners.

July – August 2016. The Eco-Ambassador program will begin the first week of July and run for seven weeks until mid-August. Conduct learning activities and at least seven practical initiatives in the affected communities (see earlier list).

September 2016. Analyze feedback from partner congregation and Eco-Ambassador questionnaires. The project manager will follow-up with both groups via phone in six

months and one year to learn how they have since applied learning and resources.

V. Organizational Capacity and Programmatic Capability

Faith in Place began in 1999 as a project of CNT and incorporated as a non-profit organization in 2003. It has since grown to 1,000 congregations serving over 360,000 people throughout the state of Illinois. It has policies and procedures documented and in place in order to properly manage the grants and contributions received. Through the review of staff, board of directors and independent auditors, Faith in Place ensures that all monies are expended and accounted for in compliance will all federal, local and donor regulations.

Here are details on the four federal grants we received between 2010 and 2014 and for which we met all regular progress and financial reporting requirements.

1. USDA Forest Service. 09-DG-11132762-242. 7/15/2010-12/31/2011. Michael Rizo, U.S. Forest Service Program Manager. Clare Butterfield, project manager. Youth butterfly garden.

2. USDA Agricultural Marketing Service. 12-25-G-1329. 10/2011-08/2013. Ms. Camia Lane, Farmer's Market Promotional Management Analyst. Roslyn Priester, project manager. Winter farmer's markets.

3. USDA Agricultural Marketing Service. 14-FMPPX-IL-0060-IL-286. Ricardo Krajewski, Farmers Market Promotional Program Officer. Brian Sauder, project manager. Winter farmer's markets.

4. USDA Forest Service. 14-DG-11132762-438. Michael Rizo, U.S. Forest Service Program Manager. Brian Sauder, project manager. Monarchs, Birds, Migration, and Me habitat restoration.

Faith in Place's organizational and administrative systems includes an annual third-party audit. Executive Director, Rev. Brian Sauder has an MBA. He meets monthly with a Certified Public Accountant to review and track financials. He also reports to the Executive Committee of the Board of Directors monthly to monitor financials and performance. Quickbooks is used with Standard Accounting Practices (SAP). Financial and performance reports are generated quarterly for review with the entire Board of Directors.

Management of staff includes a weekly staff meeting, setting weekly goals for individual work plan progress (to implement annual plans). This allows us to maintain a culture of accountability and support for everyone involved with the organization.

All of our existing administrative and organizational systems will be applied to this proposal. As with all grants, monthly budget update reports and performance metrics will be reviewed by the Executive Director and CPA.

VI. Qualifications of the Project Manager

The project manager will be Veronica Kyle, Congregational Outreach Director. She has worked with Faith in Place since 2008 and was personally responsible for adding over 100

Chicago area African-American congregations to our membership.

Veronica has worked very closely with member congregations in Avalon Park/Chatham and South Holland (where she is a member of Covenant UCC) for the past five years. She is very familiar with these communities and has helped them to implement multiple environmental stewardship projects on topics such as weatherization, community gardens, habitant restaurant, and water conservation.

Veronica was named by the North American Association of Environmental Educators as one of twenty-six Climate Change Fellows for 2014-2015. She is currently working with the Chicago Botanical Garden on their C3I (Connecting Climate to Communities Initiative) project to develop culturally-relevant communications and engagement strategies related to climate change. Developing messages on the need for flooding preparedness related to preserving family and cultural memories is part of this effort. She was also nationally recognized as a Toyota Together Green Fellow for 2013, in association with the National Audubon Society, for a congregation-based project on habitat restoration.

Veronica helped design and has overseen the Eco-Ambassadors youth program since its inception in 2006. This program has worked with 18 partner organizations and engaged as many as 80 youths over a single summer. She excels at sharing information, coordinating events and supporting congregations that are new to the idea of living out their faith as good stewards of the environment.

Veronica understands exactly what messages have relevance and traction in these communities and her insights have helped us to bring new audiences to environmental work. For example, she helped Faith in Place to create an African-American specific version of the Just Eating curriculum, a faithful approach to healthy eating and food stewardship. She also designed the innovative and popular Monarchs, Birds, Migration, and Me initiative that ties family stories of immigration to the creation of native plant gardens.

A Chicago native and lifelong environmentalist, Veronica worked previously for twelve years in the Caribbean and Southern Africa for a faith-based organization. She received her B.A. in Religion and Women Studies from Vermont College of Norwich University and her Master's degree in Gender Studies from the University of the West Indies. See Veronica's resume for more details.

VII. Past Performance in Reporting on Outputs and Outcomes

We have received comparably sized grants for our Monarchs, Birds, Migration, and Me habitat restoration program which works with similar kinds of congregations primarily on Chicago's South Side. This program costing $44,000 per year is currently being co-funded by a grant for $17,300 from the Gaylord and Dorothy Donnelley Foundation, $4,500 of our own funds, and $22,000 from the Illinois Coastal Grants Program for Environmental Education from the Illinois Department of Natural Resources (IDNR). Reporting for this grant includes monthly budget updates, allocating costs from staff timesheets, which are reviewed and approved by the Executive Director and a CPA. It also includes reporting of monthly performance metrics towards the project's inputs and outputs, included in the overall project's work plan. These monthly reports are compiled quarterly and submitted to the

IDNR for review, allowing for reimbursement of the work accomplished.

The Gaylord and Dorothy Donnelley Foundation has also funded us in the past, granting $30,000 for the previous program year that ended on April 1, 2014. Our program officer, Arthur Pearson, can provide a reference if that is helpful. In 2012, we carried out an earlier iteration of the same program which was funded for $25,000 by the National Audubon Society. Judy Pollock would provide positive references on this. We have also had many other successful grant experiences, for various programs, in this grant project size in the past.

VIII. Quality Assurance Project Plan (QAPP) Information

This project will not collect samples, scientific data, or personal information for analysis.